Expansion of Bristol Airport to 12mppa –

Planning Appeal

PINS Ref APP/D0121/W/20/3259234

SUMMARY OF EVIDENCE

IMPACT OF COVID-19

for Bristol XR Elders Group

Sally N Lawson BSc, PhD

Emeritus Professor, University of Bristol

June 2021 **XR/W2/3**

I am Sally Lawson, Emeritus Professor of Physiology and Neuroscience. My BsC, PhD and posts from lecturer to Professor and Emeritus Professor on retirement, were all in the Medical School of the University of Bristol. I lectured to Medical and Dental Students in the School of Medical Sciences for >30 years. Topics included the nervous system, pain, stress, cellular and molecular biology, and medical histology. My Wellcome Trust-funded research group studied electrophysiology, neuroscience and molecular biology of sensory nerve cells and their contribution to chronic pain. This led to 67 published papers.

SUMMARY

The tiny SARS-COVID-2 virus is the "elephant in the room" that causes COVID-19 disease that has reduced pax numbers much more and for much longer than predicted. Vaccines are helping in the UK but, for full recovery, world-wide vaccination is essential. Without this, new variants will continue to emerge that are more transmissible, more able to evade vaccines or the immune system or cause more serious disease. If variants cause further or greater outbreaks of COVID-19 (as in the UK at present) greater stringency of UK and/or EU governments to travel results, decreasing air travel and thus decreasing transmission of the virus and its variants. The effect is, and will continue to be, an unpredictable stop/start (oscillatory) extended recovery profile for both COVID-9 and air travel until world vaccination is successful.

Conclusions

The depressing effects of COVID-19 on pax numbers were seriously underestimated by early forecasts. New data shows these are much greater than expected with poor signs of recovery so far. Many COVID-19-related issues affect pax numbers. These issues interact to cause ups and downs (oscillations) which may continue for many years. Known issues include case levels, severity of disease, r numbers and new variants. These affect Government stringency levels, which can limit travel and increase both costs and uncertainties of travelling. Perhaps most importantly, the roll-out of world-wide vaccination is essential for a real end to be in sight. As world vaccination increases, the emergence of variants will decline. This will eventually allow cases to reduce enough for a new "normality" to return. Emerging variants that are more transmissible and/or evade vaccines, and/or cause more serious disease, may set this progress back, as the Delta variant is currently doing. Future variants may set recovery back even more. Because air travel contributes to spread of the virus, prevention measures that reduce air travel will reduce the spread of the virus and its variants.